Amendments to the Claims

The following listing of claims replaces all prior versions and listings of claims in the application:

1. (Currently Amended) An apparatus comprising:
a first phase-shift generator to provide a phase-shift of substantially $\pi/2$ radians to an oscillation signal between a first oscillation tank, which provides substantially no phase-shift, and a second oscillation tank;
a second phase-shift generator to provide a phase-shift of substantially $\pi/2$ radians to the oscillation signal from the second oscillation tank; and
a phase-inverter to invert the phase of the oscillation signal,
wherein the phase-inverter comprises an amplifier to provide a gain such that a total gain across a loop, which comprises the amplifier, the first and second oscillation tanks, and the first and second phase-shift generators, is equal to substantially one.

2. (Canceled)

3. (Canceled)

4. (Canceled)

5. (Canceled)

6. (Currently Amended) The apparatus of claim [[5]] 1, comprising one or more transconductors to convert said oscillation signal from voltage to current.

7. (Currently Amended) An oscillator comprising:
a first oscillation tank which produces substantially no phase-shift;
a second oscillation tank which produces substantially no phase-shift; [[and]]
a first phase-shift generator to shift by substantially $\pi/2$ radians a phase of a signal from said first oscillation [[tank.]] tank;
a second phase-shift generator to shift by substantially $\pi/2$ radians a phase of a signal from said second oscillation tank; and
a phase-inverter to invert a phase of a signal from said additional phase-shift generator,
wherein the phase-inverter comprises an amplifier to provide a gain such that a total gain across a loop, which comprises the amplifier, the first and second oscillation tanks, and the first and second phase-shift generators, is equal to substantially one.

8. (Currently Amended) The oscillator of claim 7, comprising ~~an additional phase-shift generator to shift by substantially $\pi/2$ radians a phase of a signal from the second oscillation tank~~ one or more transconductors to convert an oscillation signal of said loop from voltage to current.

9. (Currently Amended) A wireless communication device comprising:
a dipole antenna to send and receive wireless signals; and
a quadrature oscillator comprising a phase-shift generator to provide a phase-shift of substantially $\pi/2$ radians to an oscillation signal between a first oscillation tank, which provides substantially no phase-shift, and a second oscillation tank;
a second phase-shift generator to shift by substantially $\pi/2$ radians a phase of a signal from said second oscillation tank; and
a phase-inverter to invert a phase of a signal from said additional phase-shift generator,

wherein the phase-inverter comprises an amplifier to provide a gain such that a total gain across a loop, which comprises the amplifier, the first and second oscillation tanks, and the first and second phase-shift generators, is equal to substantially one.

10. (Canceled)

11. (Canceled)

12. (Canceled)

13. (Canceled)

14. (Currently Amended) The wireless communication device of claim [[13]] 9, comprising one or more transconductors to convert said oscillation signal from voltage to current.

15. (Currently Amended) A method comprising:
~~providing~~ generating a first phase-shift of substantially $\pi/2$ radians to an oscillation signal between a first oscillation tank, which provides substantially no phase-shift, and a second oscillation [[tank.]] tank;
generating a second phase-shift of substantially $\pi/2$ radians to the oscillation signal from the second oscillation tank; and
inverting the phase of the oscillation signal,
wherein inverting the phase comprises providing a gain such that a total gain across a loop, which comprises the first and second oscillation tanks, generating the first phase-shift, and generating the second phase-shift, is equal to substantially one.

16. (Currently Amended) The method of claim 15, wherein the second oscillation tank produces substantially no phase-shift~~, and further comprising providing a phase shift of substantially $\pi/2$ radians to the oscillation signal from the second oscillation tank.~~

17. (Canceled)

18. (Canceled)

19. (Currently Amended) The method of claim [[18]] 15, comprising converting said oscillation signal from voltage to current.